This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Original) A method for performing timing recovery comprising:

producing a phase signal by comparing a signal received at each of a plurality of inputs to a timing signal produced by a numerically controlled oscillator (NCO);

summing said phase signals to produce a sum;

adjusting said sum into an input range for the numerically controlled oscillator (NCO); and

producing a timing signal within the NCO in response to the adjusted sum.

2. (Original) The method of claim 1 wherein said adjusting comprises:

determining whether each input can be accurately received; and

dividing the sum by a number of potentially receivable inputs.

3. (Original) The method of claim 2 wherein said determining comprises:

determining whether an amplitude of each input is greater than a threshold value.

4. (Original) The method of claim 1 wherein said adjusting comprises:

determining whether each input is receivable;

determining an offset using a number of receivable inputs; and

adjusting the sum using the offset.

5. (Original) The method of claim 4 wherein said determining comprises:

determining whether an amplitude of each input is above a threshold value.

6. (Original) The method of claim 4 wherein said adjusting by said offset comprises:

adding the sum by the offset if the sum is below the input range.

7. (Original) The method of claim 4 wherein said adjusting by said offset comprises:

subtracting the sum by the offset if the sum is above the input range.

8. (Original) An apparatus for performing timing recovery of a signal received at a plurality of inputs, said apparatus comprising:

a plurality of phase detectors each detecting a phase of said signal at a different input by comparing the input signal to a timing signal from a numerically controlled oscillator (NCO);

a summer for adding said detected phases to form a sum;

a level shifter for adjusting the sum to within an input range of said NCO;

a loop filter for filtering the adjusted sum; and

the NCO for generating a timing signal in response to the filtered sum.

9. (Original) The apparatus of claim 8 further comprising:

a plurality of signal detectors each for determining whether an input signal is receivable; and

a decision circuit using a total of receivable input signals to determine an adjustment to the sum by said level shifter.

10. (Original) The apparatus of claim 9 wherein said decision circuit divides the sum by the total of receivable input signals.

11. (Original) The apparatus of claim 9 wherein said decision circuit determines an offset that is added to or subtracted from the sum by said level shifter.